

Idler Arm Support and Weld In Gusset
INSTALL INSTRUCTIONS:

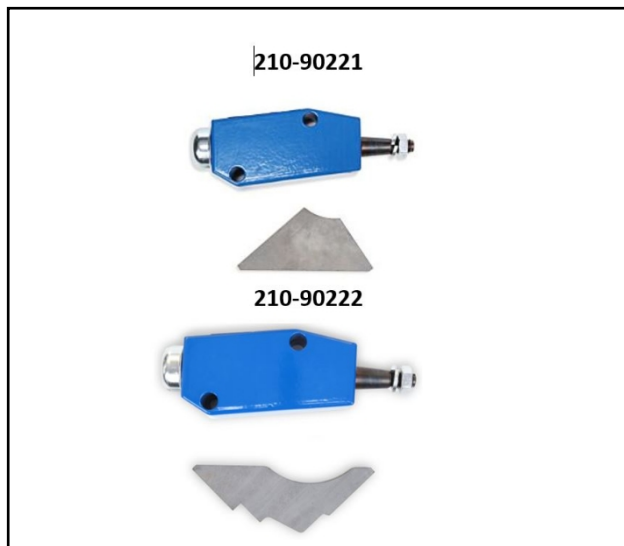
Idler Arm Support and Weld In Gusset
SKU: 210-90221/210-90222

PARTS LIST FOR SKU: 210-90221

QUANTITY	PART #	DESCRIPTION
1	1264	Gusset 99-06 6-Lug Idler Arm Frame Support
1	SUPERSTEER-SS175	Ss175 Idler Arm Support

PARTS LIST FOR SKU: 210-90222

QUANTITY	PART #	DESCRIPTION
1	1263	Gusset 01-10 8-Lug Idler Arm Frame Support
1	SUPERSTEER-SS175	Ss175 Idler Arm Support


WARNING

Please read this entire instruction sheet before beginning installation. Proper installation of these components requires a qualified mechanic. Always wear safety glasses when using power tools, and take appropriate precautions when working under a vehicle. If these instructions are not properly followed you may jeopardize your, and your passenger's safety, and severe frame, suspension or tire damage may also result from improper installation.

Modification of vehicle suspension can interfere with ride-height sensors, active suspension, lane departure features, semi-autonomous, and autonomous driving features. It is the responsibility of the mechanic to determine feature compatibility prior to installation. Recalibration of sensors may be required in the event of any modification.



INTRODUCTION

Thank you for purchasing the Cognito Idler Arm Support Weld In Gusset Kit. The idler pivot is what the idler arm mounts to and pivots about, and the OEM idler pivot has issues with bending the shaft and also bending the tabs on the frame that locate the idler pivot.

When these issues happen, the passenger side of the drag link ends up higher in the frame, creating an excessive angle of the passenger tie rod and usually causes tie rod problems. The Cognito Idler Pivot is a much stronger upgrade that has a hardened alloy steel shaft with tapered roller bearings.

Also included is a weld in gusset to strengthen the frame tabs in order to keep the steering components moving in their intended positions. Unwanted steering movements and play lead to premature tire and tie rod wear, lower fuel economy, lane wandering and poor steering control.

REQUIREMENTS

- Installation requires a qualified mechanic.
- Follow the OE specifications when replacing or re-installing OE fasteners, retainers, and hardware specified in the OEM manual.
- Always wear safety glasses when using power tools.
- When a lift is required to perform the installation of these products and always ensure the vehicle is properly supported before attempting installation or serious injury may occur.

TECH NOTES

- **Upon completion of the installation, the front end alignment must be checked in order to obtain optimal results.**
- It is necessary to raise the vehicle to perform installation of these products. A hoist or installation bay is recommended. Always ensure the truck is properly supported before attempting installation as serious injury could occur.

INSTALLATION

1. If you are installing this on a Hummer H2, Please see page 4. If installing on a 1500HD, 2500HD, 3500HD Please continue with steps 2-11.
2. Remove the front shield - set it aside with the hardware.
3. Disengage the idler arm by loosening the large nut at the bottom end of the OEM unit.
4. Remove the nut, lock washer and idler arm – discard the nut and lock washer. Set the idler arm to the side.
5. Remove the mounting bolts (quantity of 2), washers and locknuts and the OEM unit – discard the hardware – salvage the OEM unit.
6. Install the weld in gusset as shown in the picture below. A qualified welder will be needed at this point. ****Do not quench welds****
7. Clean and paint all raw metal surfaces after welds have cooled.
8. Install the new Idler Pivot Assembly (noted in figure 1.1) in the reverse manner above, using the supplied 9/16 – 12, Grade 8 bolts, flat washers, and locknuts. (Flat washers must be under the bolt head and between the nut and the frame bracket.) **Torque to 100ft. lbs.**
9. Reassemble the idler arm to the Idler pivot assembly, using the new lock washer and nut supplied.
10. Check any hoses or lines for interference with the larger pivot assembly and gusset. Tie back any lines or hoses as needed to avoid rubbing wear issues.
11. Check the alignment per the vehicle’s manual.

*****Use this figure to ensure proper installation*****



Hummer H2 Installation Guide

1. Remove the front shield. Set aside with the hardware.
2. Remove the nut at the bottom of the OEM unit which holds the idler arm in place. Disengage the idler arm from the OEM Support Assembly using a large mouth tie-rod separator.
3. Discard the nut and set the idler arm aside.
4. Remove the mounting bolts (quantity of 2), washers & lock nuts and the OEM unit – discard the hardware and the OEM unit. (Hummer H2 specific)(See Figure A for existing H2 brace)
5. Cut the top plate of the brace so it is flush with side braces. Cut the bottom plate 1/2" and bend it down. (See Figure B for cut brace)
6. Weld the gusset (SS125) in the center of the brace, forward to frame. (See Figure C) Gussets optional on pickups.
7. Install the SuperSteer Idler Arm Support Assembly (SS175) in the reverse manner above, using NEW 9/16-12, grade 8 bolts, flat washers and locknuts. (Flat washers must be under the bolt head and between the nut and the frame-bracket.) **Torque to 100 ft. lbs.**
8. Reassemble the idler arm to the SS175, using the new lock washer and nut supplied. Torque to 100-125 ft. lbs. Check the alignment per vehicle's manual.



FIGURE A – Existing Brace



FIGURE B – Cut Brace



FIGURE C - Gusset welded in center of brace; SS175 installed.



WARRANTY / RETURN POLICY / SAFETY

Cognito Limited Lifetime Warranty

Cognito Motorsports, Inc. hereinafter “Cognito,” warrants to the original retail purchaser, that its suspension products are free from workmanship and material defects for as long as the purchaser owns the vehicle on which the product(s) were originally installed. This warranty will be void if any modifications are made to the components, including alterations to the surface finish, i.e.; painting, powder coating, plating, and/or welding, or if they are improperly installed. Cognito truck suspension products are not designed nor intended to be installed on “competition” vehicles used in race applications, stunt or for exhibition purposes that are outside of the intended operating conditions specified by the manufacturer. Racing and competition are defined as any contests between two or more vehicles; or vehicles competing individually on off road circuits in timed events (whether or not such contests are for an award or prize).

This warranty does not include coverage for police, taxi, government or commercial vehicles, and the warranty does not cover Cognito products sold outside of the USA. Cognito’s obligations under this warranty are specified and applied at its sole discretion, and warranty coverage is limited to repair or replacement of the defective product(s). Any and all costs of removal, installation or reinstallation; freight charges, incidental or consequential damages associated with the covered products are expressly excluded from this warranty.

The following items are exempt from Cognito limited warranty coverage: bushings, bump stops, tie-rod ends (Heim joints) and limiting straps. These parts are “consumables” and designed to wear as a normal part of their duty cycle, therefore they are not considered defective when worn. The aforementioned products are warrantied separately against defects in workmanship, for 60 days from the date of purchase. As a condition of warranty validation, respective Cognito suspension components must be installed as a complete system (not combined with non-Cognito hardware or ancillary parts). Any substitutions or omission of required components will void the warranty. Some minor cosmetic wear and imperfections may occur to parts during shipping, which is not covered under this warranty. This limited warranty does not apply to any components that have been subjected to collision damage, negligence, alteration, abuse, or misuse, and coverage does not extend to products manufactured by third-party companies. Cognito reserves the right to supersede, discontinue, or change the design, finish, part number and/or application of its parts when deemed necessary, without notice.

Return Policy

Product returns will not be accepted without prior written approval from an authorized Cognito representative. All products being returned must be shipped via trackable, prepaid freight. Returned products are subject to a 25% percent restocking fee. The eligible return period for products purchased directly from Cognito is 30 days from the verified date when the product(s) were originally received by the purchaser.

Product Safety Advisory

The installation of Cognito steering and suspension components will modify your vehicle’s original factory equipment and geometry, which may cause it to handle differently than a stock (unaltered) vehicle. Installation of these components is not intended to strengthen nor reinforce the vehicle’s frame, nor are they designed to increase rollover protection. It is necessary to periodically inspect all suspension and drive train components for proper attachment, torque specifications, operation, and for any potential unusual wear or damage. Installation of these parts will modify the height of the vehicle and may raise the center of gravity. Modifying vehicle height combined with off road operation may increase your vehicle’s susceptibility to rollover conditions, which may cause serious injury or death. Many states regulate allowable vehicle height modifications, and it is your responsibility to know and comply with the legal requirements specified by the laws where you reside. Modifications to your vehicle’s ride height may also affect the ride quality, driver input response, trackability and handling, and wear to your vehicle’s suspension components and tires.